

GENE ENCODING NADE, P75^{NTR}-ASSOCIATED CELL DEATH
EXECUTOR AND USES THEREOF

5 **Abstract of the Disclosure**

10 This invention provides an isolated nucleic molecule
encoding a polypeptide capable of binding a p75^{NTR}
receptor, and a purified version of said polypeptide
capable of binding a p75^{NTR} receptor. This invention
15 provides a method of producing a purified polypeptide
capable of binding a p75^{NTR} receptor. This invention
provides an antisense oligonucleotide having a nucleic
acid sequence capable of specifically hybridizing to
an mRNA molecule encoding the above described
20 polypeptide. This invention provides a method
producing a polypeptide capable of binding p75^{NTR}
receptor into a suitable vector. This invention
provides a method of inducing apoptosis, a method of
determining physiological effects, a method for
25 identifying an apoptosis inducing or inhibiting
compound, a method for screening cDNA libraries of
said polypeptide, a method to induce caspase-2 and
caspase-3 activity to cleave poly (ADP-ribose)
polymerase and fragment nuclear DNA in a cell, a
30 method to inhibit NF- κ B activation in a cell, a method
to detect a neurodegenerative disease, a method of
producing the isolated human HGR74 protein into a
suitable vector, a pharmaceutical composition
comprising a purified polypeptide capable of binding
35 a p75^{NTR} receptor and a pharmaceutically acceptable
carrier and a method of identifying a compound which
is an apoptosis inhibitor.